# CURRENT AUSTRALIAN APPROACHES TO HEAVY VEHICLE ACCREDITATION AND COMPLIANCE FOR MASS LIMITS

# Peter Leyden, Kirsty McIntyre and Barry Moore

National Transport Commission, Australia.

# ABSTRACT

This paper provides an overview of current Australian approaches toward improved compliance with heavy vehicle mass limits. The discussion relates primarily to recent initiatives in installing a staged severity of breaches regime for mass offences and a schedule of 'measurement adjustments' that is dependent on weighing equipment and weighing procedures, in a regulatory environment where a chain of responsibility applies to all parties engaged in the freight transport process.

The paper also reviews the role of various Australian heavy vehicle accreditation schemes in the overall mass limits compliance and enforcement picture. It takes up from previous work submitted to the 5<sup>th</sup> ISHVWD by Yeo and Moore on the progress of various mass management pilot schemes being conducted at that time, and on the then emerging National Heavy Vehicle Accreditation Scheme. It discusses the emerging role of these schemes in assisting with transport operators' duty of care and as an aid in providing evidence that chain of responsibility obligations have been met.

# INTRODUCTION

Enforcement of heavy vehicle mass limits is a matter that is of pivotal importance to road transport regulatory authorities with implications for road safety and infrastructure protection outcomes. With a modern emphasis on decreasing government expenditures and improving transport productivity, Australia's National Transport Commission  $(NTC)^1$  is developing reforms that apply more innovative compliance mechanisms rather than to rely almost solely on roadside detection of offences. Roadside detection is costly for regulatory authorities and the transport industry, and is potentially indiscriminate in so far as costs are incurred by regulatory agencies and to transport operators in stopping and weighing compliant vehicles.

In an earlier paper Yeo and Moore (1998) described approaches to assist in the enforcement of mass limits that were being developed at that time, and which were based on quality management principles. These approaches were termed as 'Alternative Compliance' schemes, being an alternative means of demonstrating compliance with road transport law, however they were probably better described as heavy vehicle accreditation schemes. These schemes were seen to offer a more flexible and sophisticated approach in the overall mass limits compliance effort as well as potentially providing other benefits to the road transport industry through better outcomes in road safety and occupational health and safety.

Subsequent to these initiatives, and within the broader work being undertaken by the NTC on compliance and enforcement reforms, a model set of conventional compliance and enforcement provisions has now been developed that is intended to underpin the Commission's national compliance strategies. Principal among these strategies is the philosophy that all parties in the transport chain should be held responsible for those actions over which they exercise control. This has led to the development of 'chain of responsibility' accountabilities and 'best practice' tools have been provided for enforcement actions together with necessary sanctions and penalties.

<sup>&</sup>lt;sup>1</sup> The NTC is established under an inter-governmental agreement between the Australian Commonwealth, State and Territory Governments. Its role is to work with government, industry and other Australian transport industry stakeholders and to introduce nationally consistent policies and laws with the primary focus on improving productivity and safety for road, rail and intermodal transport. Formerly the NTC was the National Road Transport Commission (NRTC). The NRTC became the NTC on 15 January 2004.

Proceedings 8<sup>th</sup> International Symposium on Heavy Vehicle Weights and Dimensions 'Loads, Roads and the Information Highway' Proceedings Produced by: Document Transformation Technologies

# PRIOR APPROACHES TO MASS LIMITS COMPLIANCE AND ENFORCEMENT

### Weighing tolerances

The problems associated with the degree of accuracy to which heavy vehicles can be weighed at roadside locations, especially in the absence of certified weighbridges, was addressed extensively in Yeo and Moore (1998). In Australia, a table of tolerances was developed by the then National Association of Australian State Road Authorities (NAASRA) in the 1980's. These tolerances (which became known as the NAASRA tolerances) specified allowances by which the scale reading of a vehicle being weighed could exceed the statutory mass limit. The tolerance was primarily directed at accounting for scale inaccuracies and other inaccuracies brought about by the need to often weigh a multi-axle group vehicle individually for each axle group, as well as to account for adverse site conditions and load shifting during this process.

Although these tolerances were developed by NAASRA, they were implemented by the state and territory road agencies and police forces. Different tolerances were applied to different classes of vehicles. For example, a six-axle articulated vehicle was afforded a tolerance of 1.0 tonne on a statutory Gross Combination Mass (GCM) of 42.5 tonne.

Yeo and Moore (1998) discussed at some length issues of dealing with these weighing 'tolerances', that, when added to statutory mass limits, had become de facto mass limits to which the road transport industry then customarily operated. It became evident that some operators, particularly those that had good load control, deliberately loaded to the level of the tolerance rather than to the legal limit, assuming that they would not be prosecuted. Such overloading, though minor, resulted in accelerated road wear and unfair competition. Additionally, different jurisdictions have applied the 1987 NAASRA tolerances in different ways, adapting them to suit different circumstances.

Since loadsharing regulations were introduced in Australia only in the late 1970s they were not built into the 1987 NAASRA tolerances. By now, however, all axles in tandem and triaxle groups should share loads effectively so that they cause less damage to the roads. Suspension hysteresis, which occurs when friction in springs and linkages prevents the suspension returning exactly to its equilibrium position, remains a significant characteristic of heavy vehicles and therefore still has to be taken into account in mass enforcement policy. Nevertheless, modern scales used by enforcement agencies to weigh heavy vehicles are generally thinner than the scales used in the NAASRA studies in the 1970s and 1980s but they are at least as accurate as the older scales. Being thinner they are less prone to tilt vehicles sufficiently to affect the distribution of the load between axle groups during weighing. There has however been little change in the nature of the inspection sites where heavy vehicles are weighed on portable scales but there are now more of them, and there are also more fixed plate weighbridges available for use by both operators and enforcement agencies (Austroads, 2003).

The national Compliance and Enforcement: Mass, Dimensions and Load Restraint Policy (NRTC, 2000) approved by Ministers in November 2000, brought a fresh focus to the need for national consistency. While the principles underpinning the application of the NAASRA tolerances remain valid, there have been significant changes in the industrial, legal and technical environments. There is therefore a renewed national commitment to reinforcing the applicability of the legal limit, not the de facto increased limit of the tolerance level.

# **HEAVY VEHICLE ACCREDITATION**

## Early initiatives in heavy vehicle accreditation

Australia is one of few developed economies that does not have operator licensing in road transport and there have been many suggestions to introduce licensing since the early 1980s. However, it was considered by the NRTC in the early 1990s that accreditation was a more effective means of demonstrating compliance with road transport law and was more attuned with modern practices in compliance and enforcement. This philosophy had led to the instigation in the mid 1990s of a pilot accreditation scheme in mass management in the state of Victoria and another pilot in maintenance management conducted in the state of New South Wales. During the same period, road transport industry bodies had been developing accreditation schemes that were directed specifically at road transport operations and one of these schemes, known as TruckSafe, had achieved a degree of industry presence by the mid-1990s.

### Mass management pilot scheme

As mentioned, the Victorian roads authority, VicRoads, implemented a pilot mass management accreditation program in 1995, initially with nine operators. The pilot program (referred to as MMAP or Mass Management Accreditation Pilot) was developed in conjunction with the NRTC, state road agencies, road transport operators, police and a representative of a motoring organisation. The purpose of the pilot was to test the extent to which this alternative means of demonstrating compliance could achieve the potential benefits that had been identified by the NRTC and which were described in Yeo and Moore (1998).

Central to this pilot scheme was how the weighing tolerance issue should be managed for operators accredited in the pilot program. While there was the perception among non-accredited operators that the mass limit which is enforced includes the tolerance, accredited operators would not able to use this tolerance, as detection above the statutory mass limit, either through roadside weighing or by audit of operator records, would technically be recorded as a non-conformance with the operator's mass management accreditation. It was therefore suggested that accredited operators should be permitted to load to the statutory mass plus the tolerance mass for the particular vehicle combination. If the legal limit had been enforced, it is arguable that accredited operators would have been disadvantaged in relation to operators outside the scheme. If the tolerance was permitted, it is arguable that operators were required to target the statutory mass limits plus the nationally agreed NAASRA tolerances.

#### Development of the national heavy vehicle accreditation scheme in Australia

The successful implementation of the MMAP and the maintenance management pilot in NSW, led to the development of a national accreditation scheme. In 1997 Australian Transport Ministers approved a scheme whereby state based agencies could offer accreditation in three defined modules, being mass management, maintenance management and fatigue management, of a national heavy vehicle accreditation scheme (NHVAS). The scheme was to be administered through the state based road authorities using a common set of standards, audit procedures and business rules. Operators could seek accreditation in any or all of these modules and accreditation in any state would be granted mutual recognition in all other states.

Through this scheme, operators would be able to demonstrate compliance with road transport law in areas of vehicle mass, vehicle condition and driver fatigue management (although the fatigue management module has yet to be implemented). It was envisaged that accredited operators, who are required to badge their vehicles with an identifying label, would be subject to a lower incidence of on-road enforcement. Additionally, maintenance management accredited operators would be entitled to access to a regulatory concession by way of exemption from annual vehicle inspections in those states where these inspections are mandatory. The scheme was nevertheless intended to be completely voluntary.

Operators seeking accreditation are required to demonstrate that they have systems and procedures in place that will provide evidence that they have adhered to the standards laid down for the specific module or modules of the NHVAS for which accreditation is being sought. Accredited operators are subject to an ongoing audit regime to ensure that compliance with the standards is being maintained. The NHVAS standards, audit requirements and business rules are available on the NTC's website.

#### **Industry-based schemes**

The Ministerial decision of 1997 that implemented the NHVAS acknowledged the development to that date, and potential for future development, of industry based heavy vehicle accreditation schemes. As mentioned, the industry scheme TruckSafe had established itself as a substantial player in Australian heavy vehicle accreditation. These types of scheme were seen to offer many potential benefits to Australian road transport and there was a desire by Ministers to create a position for industry-based schemes in the new national heavy vehicle accreditation picture. The Ministerial decision contained a provision that "It is envisaged that membership of any industry scheme which adopted common standards and audit practices would allow operators automatic entry into the relevant module or modules of the Heavy Vehicle Accreditation Scheme".

### Current Australian heavy vehicle accreditation picture

However since the NHVAS has been implemented, other concessions have been attached to accreditation, notably access to higher mass limits for tri-axle vehicles which are equipped with road friendly suspensions. The commercial incentives that this concession provides could be argued to be such that the commercial disadvantage suffered by non-accredited operators makes the scheme less than truly voluntary. Additionally, other concessions have been allowed to accredited operators by various states, notably access to certain parts of the road network for larger vehicles, if these vehicles are accredited in certain modules of the NHVAS. As well, there are proposals for requirements for accreditation for road transport operators to be eligible to operate under Performance-Based Standards.

The continuing trend to attach various concessions to participation in heavy vehicle accreditation schemes raises the stakes for both regulators and operators. The potential commercial penalties for an operator in losing accredited status, coupled with the possibility of an aggrieved operator wishing to challenge a regulator's decision either not to accredit, or to remove accreditation, means that an increasing level of rigour is required in the scheme documentation, the underpinning legislation and the processes and manner in which the scheme is administered.

NHVAS has been implemented in all Australian jurisdictions except Western Australia, Australian Capital Territory and the Northern Territory. In 2001, WA introduced a mandatory accreditation scheme for all vehicles required in that state to operate under permits (generally vehicles larger than 6-axle articulated vehicles). The WA scheme was based on NHVAS documentation, but with a more frequent audit cycle.

In the period since the Ministerial decision, the way in which industry and regulatory schemes should interact has been evolving, particularly with regard to the role these two types of scheme should play in the administration of regulatory concessions. As mentioned, as the concessions granted to accreditation scheme participants increase, the potential for legal challenge against dis-accreditation increases. If industry-based schemes were to offer in their own right regulatory concessions, they would have to indemnify themselves against such legal challenges whereas indemnity can more easily be granted in law to schemes that are managed by government bodies. Additionally, if industry schemes had wished to take on, in effect, a regulatory role, it would have been necessary for those schemes to be themselves regulated. This is an encumbrance that neither the industry bodies nor the regulators have wished to entertain.

The NTC's view has been that the emphasis should be on heavy vehicle accreditation more generally and to engender as much co-operation as possible between industry based and regulatory accreditation schemes within defined roles to which each type of scheme is best suited. It is believed that through such co-operation road transport industry participation in accreditation schemes will be maximised along with the better compliance outcomes, road safety and productivity that accreditation is seen to promote. Industry schemes can also provide the structures that underpin the business processes that are required for accreditation, as well as potentially acting as a 'gateway' to NHVAS for many operators who would otherwise have difficulty in attaining and maintaining the standards required. Also, by having auditors accredited to audit in both industry schemes and regulatory schemes, and common audit dates, the marginal cost of accreditation in additional schemes is negligible.

## NEW COMPLIANCE AND ENFORCEMENT REFORMS

#### Mass measurement adjustments

In the light of the issues raised earlier in the use of the concept of weighing tolerances, the matter of physical measurement of the mass of heavy vehicles has been reviewed. It was determined that the standard of legal certainty could now be achieved with the NAASRA tolerances replaced by Measurement Adjustments (MAs) as shown in Table 1 (Austroads, 2003).

Table 1.	Measurement	adjustments.
----------	-------------	--------------

Axle group	Measurement Adjustment (MA)		
	Category 1 weighing	Category 2 weighing	Category 3 weighing
Single axle with single tyres	0.3	0.3	0.3
Tandem axle with single tyres (or combination of single and dual tyres)	0.3	0.3	0.5
Single axle with dual tyres	0.4	0.4	0.5
Tandem axle with dual tyres	0.5	0.5	1.0
Triaxle	0.5	0.5	1.0
Gross mass	0.25 per weighing step	0.5 per weighing step	1.0 per weighing step

Notes:

All masses are in tonnes.

The three categories of weighing will be defined in the mass measurement guidelines that are currently under development. In short:

Category 1 weighings are generally weighings at certified weighbridges

Category 2 weighings are generally weighings at well set out temporary roadside sites on portable scales in good conditions.

Category 3 weighings are generally weighings conducted under less favourable conditions than Category 1 or Category 2 weighings. In the interests of certainty, the mass measurement guidelines will place limits on the circumstances where heavy vehicles can be weighed even with a Category 3 MA.

Weighing Step. When calculating gross mass, the relevant MA will be applied each time the vehicle is moved during the weighing process, even if it returns to the same point after the weighing as before the weighing.

These MAs take into consideration scale inaccuracies, measurement site geometry, vehicle suspension hysteresis effects, environmental effects and the weighing method, but no longer accommodate the additional 'administrative component' that was part of the NAASRA tolerances. There will be three different rates of measurement adjustment (MA) applied to three different categories of weighing. The effect will be that the applicable MA will be deducted from the detected mass (ie. the mass shown on the weighing device). It is acknowledged that some operators might consider that there is still the potential in this regime to exploit a 'residual tolerance'. However it is unlikely that many operators will be able to conduct their operations with certainty that they would not be subject to a Category 1 weighing. With many weighbridges able to accommodate a six-axle articulated vehicle in one weighing step, or a B-double in two, the variation remaining after making allowances for scale inaccuracies is so small that there is little or no commercial advantage in pursuing it. Furthermore, this approach leaves no doubt that once the MA has been taken into account, if the resultant measurement exceeds the statutory limit an offence will have been committed. Loading to the MA level is likely to be too much of a gamble for the small productivity benefit obtainable.

## Chain of responsibility

In general, existing heavy vehicle legislation in Australia, the United Kingdom and the United States imposes liability for breaches of the mass, dimension and load restraint requirements only on drivers and/or operators and owners of heavy vehicles. The role played by other parties in the transport chain is not addressed, other than by way of indirect 'cause or permit' and 'aid or abet' style offences, which are not only difficult to prove, but which lack sufficient specificity to be effective as deterrent measures. Hence the existing legislation has little, if any, deterrent effect on those other parties, many of whom may have a significant bearing on the activities that affect compliance with the road laws.

The model Compliance and Enforcement Bill (NRTC, 2003a), approved unanimously by Australian Transport Ministers in November 2003, reflects the NTC's commitment to the 'chain of responsibility' principle. As has already been stated, this is that all who exercise control in a road transport activity should be made accountable at law for failure to discharge that responsibility. In their specific application to the

areas of heavy vehicle mass, dimension and load restraint, the new compliance and enforcement provisions impose duties on those exercising control over any of the following essential activities in the road freight transport task:

- consigning;
- loading;
- carrying;
- driving; and
- receiving.

As well, special duties apply to those who pack goods for road transport and those who offer a container to road carriers, to ensure that accurate mass information is passed on to the road carrier. Joint and several liability will apply, so that each and every party who commits a breach may be held accountable, irrespective of the liability of any other party. Hence, an enforcement agency can target the actual party or parties who have contributed to any particular offence. For example, where only the operator and driver have overloaded a vehicle, then the enforcement agency can appropriately target only those parties. However, in a different case, where the vehicle has been overloaded by the consignor and loader (without the knowledge of the operator or driver), the enforcement agency may choose only to pursue those parties, and may choose not to take any action against the driver or operator. The aim is that enforcement agencies will have the necessary capability to ascertain who, in any particular case, has caused or contributed to the offence and to apply the most appropriate tools effectively in response. Any sanctions or penalties administered by the enforcement agency or court will also reflect the degree of involvement of each targeted party or parties in the offence in question. In this way, chain of responsibility can be used as a powerful deterrent as well as a flexible enforcement tool.

Consistent with other comparable regulatory offences in Australia, such as in the areas of occupational health and safety and environment protection, a breach of the mass, dimension and load restraint laws committed by consignors, packers, loaders, drivers and carriers will be offences of absolute liability. This means that the defence of honest and reasonable mistake will not be available. However a reasonable steps defence will be available. The effect of this is that if an offence occurs, a party is held liable unless they can demonstrate that they took reasonable steps to prevent the breach, and that they neither knew nor reasonably ought to have known of the relevant breach. This will provide a strong incentive for parties to install documented systems to achieve and demonstrate compliance. For drivers and operators, this defence will be limited to 'minor risk' offences (described below). This limitation reflects the higher level of responsibility for parties closer to the commission of the offence, and difficulties in achieving a successful prosecution if a wider defence were made available to these parties. Absolute liability and reasonable steps defence do not apply to receivers. Receivers will only be liable where they have knowingly, recklessly or negligently caused a breach by inducing or rewarding the breach.

The draft Bill also provides that a director, secretary or senior manager of a body corporate that has committed a road law offence may be punished as an individual who has been found guilty of the offence. As well, any person who causes or permits the commission of an offence or coerces, induces or offers an incentive to a person to commit an offence may be held legally accountable for that offence. It will also be an offence to discriminate against a person who has reported or raised concerns about road law breaches. For example, this offence could apply to an employer who dismisses an employee for reporting or raising such concerns. As an additional power, enforcement agencies will have enhanced authorities to enter and search premises to gather evidence.

## **Risk-based categorisation of offences**

The NTC's national Compliance and Enforcement: Mass, Dimension and Load Restraint policy (NRTC, 2000) includes the concept of a risk-based categorisation of offences. Breaches of the established mass limits will therefore be treated as minor, substantial or severe as follow (Austroads, 2003):

- A minor mass breach involves a risk of minor, accelerated road wear and the obtaining of a minor, unfair commercial advantage, with no appreciable risk of infrastructure damage and certainly no appreciable risk to safety;
- A substantial mass breach involves an appreciable risk of damage to infrastructure. There may well be some risk to safety in this category of breach but this is not an appreciable risk; and

• A severe mass breach is a serious abuse of the limits. It is of such a magnitude that it represents an appreciable risk to safety, an appreciable risk of damage to infrastructure and a clearly unfair commercial advantage.

Issues considered in the examination of levels of overloading included road damage, bridge damage and vehicle safety. There was general agreement that mass up to 5% above the legal limit (regardless of how the limit is determined) would not constitute a significant risk to roads and infrastructure. Further, an overload of no more than 5% should not cause safety problems even when this 5% is in excess of the manufacturer's rating, because at the limit all components should be operating well within their capacity. There was some concern about tyre capacity on steer axles because the sum of the rated capacities of commonly used tyres is often equal to the statutory limit for steer axles, but even in this case a 5% overload is considered acceptable (Austroads, 2003).

An overload of 105% of the legal limit, taking into account the applicable new Measurement Adjustment, was therefore set as the basis of the minor/substantial breakpoint. The substantial/severe breakpoint was confirmed as 120% of the legal limit. In practice, however, calculation and application of breakpoints based on exact percentages would be a nuisance. In order to simplify compliance and enforcement it was therefore proposed that all of the breakpoints be rounded up to the nearest 0.1t. The exceptions are vehicles with a manufacturer's gross limit of 10t or less, for which the minor/substantial breakpoint is 0.5t more than the legal gross mass. The breakpoints are to be applied to the assessed mass of the vehicle when determining the level to which it is overloaded. The breakpoints are shown in Table 2 (Austroads, 2003).

Axle group	Legal limit	Offence ranges applicable to different levels of assessed mass		
or gross		Minor	Substantial	Severe
Single steer	6.0	More than 6.0 to less than 6.3	6.3 to less than 7.2	7.2 or more
Twin steer	11.0	More than 11.0 to less than 11.5	11.5 to less than 13.2	13.2 or more
Single axle, dual tyres	9.0	More than 9.0 to less than 9.5	9.5 to less than 10.8	10.8 or more
Tandem axle	16.5	More than 16.5 to less than 17.4	17.4 to less than 19.8	19.8 or more
Triaxle	20.0	More than 20.0 to less than 21.0	21.0 to less than 24.0	24.0 or more
Gross mass	See earlier explanation of legal limits	More than the legal limit to less than 105% of the limit (rounded up to the nearest 0.1t)	105% of the limit to less than 120% of the limit (both values rounded up to the nearest 0.1t)	120% of the legal limit (rounded up to the nearest 0.1t), or more

Table 2. Examples of breach ranges.

All masses are in tonnes

The legal limit for the mass of a heavy vehicle and its load is the lowest of:

- the limit for the particular type of vehicle or combination, either under general access arrangements or under the terms of a permit, accreditation or concessional scheme; or
- the manufacturer's rating for the vehicle or any of its components; or
- a limit set under legislative authority to reflect particular conditions, e.g. a signposted bridge limit or a restricted access notice on a local road.

## **Hierarchy of sanctions**

Traditionally, the main sanctions available for breaches of the mass, dimension and load restraint requirements in road transport legislation have been fines or infringement penalties. These penalties may be

effective as punitive sanctions in some situations, but by no means all, and when they are directed solely at the truck driver, are unlikely to act as deterrents to other parties in the logistics chain.

A wide variety of responsive sanctions and penalties is contained in the Compliance and Enforcement Bill, addressing the different sanctions strategies. These sanctions and penalties include improvement orders which aim to assist an offender improve compliance performance; maximum fines which escalate according to breach category and escalating mass; commercial benefits orders which target offenders who reap profits from overloading; and supervisory intervention orders and prohibition orders to address systematic and persistent offenders. Formal warnings and infringement notices are proposed as administrative penalties for minor offences, to avoid the need for court action in such cases.

Where appropriate, any one of these penalties may be imposed against any of the parties in the chain of responsibility in respect of a breach of the road transport requirements. The sanctions and penalties form a hierarchy as set out below, in ascending order of severity.

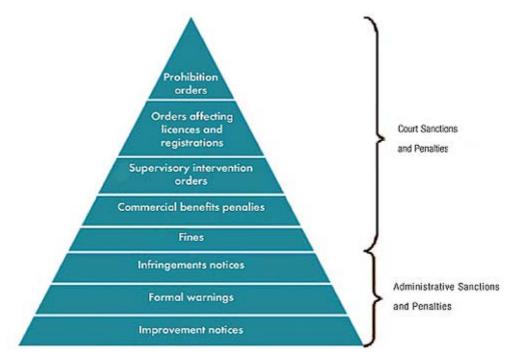


Figure 1. Hierarchy of sanctions.

As well, the Bill provides that the courts may issue a 'compensation order' against a person who has been found guilty of a road law offence. This order compensates a road authority for loss or damage to any road infrastructure caused by such offence. Under this order a road authority can recover the cost of damage, or even wear, to a particular road caused by an overloaded vehicle, without the need for costly and complex civil litigation.

#### **Implementation of the Compliance and Enforcement Bill**

With all Australian Transport Ministers having approved the model Compliance and Enforcement Bill in November 2003, the States, Territories and the Commonwealth are now commencing to introduce the new legislation and accompanying administrative changes in their own jurisdictions. The Regulatory Impact Statement supporting the Bill (NRTC, 2003b) indicates that the likely net benefits to the nation of introducing these measures is in the order of up to \$A 443 million annually with nationwide improvements in safety and reduced infrastructure damage resulting from improved compliance with road transport laws. The costs of implementing these measures are expected to be small in relation to total heavy vehicle enforcement costs, as the new initiatives will blend with current compliance and enforcement procedures throughout Australia. But they are expected to deliver substantial benefits through greatly enhanced powers to identify and prosecute non-compliant behaviour where it is occurring.

# Role of chain of responsibility in heavy vehicle accreditation

Yeo and Moore (1998) alluded to an emerging role for accreditation schemes in assisting with demonstration of common law duty of care obligations and with similar requirements under occupational health and safety legislation that had by then been implemented in all Australian states and by the Commonwealth of Australia. The Chain of Responsibility requirements that have been incorporated into road transport law will add another layer of accountability for road transport operators that is directed wholly at the way the transport operator and his staff discharge their responsibilities to ensure that road transport laws are observed.

In this respect, it will be at least beneficial and possibly crucial for operators and individual staff members, that there be verifiable document trails to demonstrate in any investigation that individual and overall responsibilities have been discharged. This appears not to have been missed by industry heavy vehicle accreditation scheme providers and transport operators. There is anecdotal evidence emerging that transport operators are seeing accreditation as providing an avenue to provide these evidence trails, with the regular third party review as to the adequacy of the documentation being produced that is provided through the accreditation audits, being of particular value.

Additionally, the purchasers of road transport and logistics services, in order to discharge their obligations under chain of responsibility, are reported to be increasingly writing requirements for accreditation into transport services contract documents. It is very likely that these developments in the new compliance regime will accentuate the need for road transport operators in Australia to develop such auditable systems and use accreditation as a means of demonstrating that they have these systems in place. If these reported trends are valid, and continue, then there will be commercial imperatives for transport operators to join accreditation programs. This may reduce the incentive to provide regulatory concessions to promote participation in accreditation.

# CONCLUSIONS

The effects of the complementary reform initiatives that are being undertaken in heavy vehicle accreditation, mass adjustments for weighing heavy vehicles, breach risk bands, a sanctions hierarchy and chain of responsibility, provide an enhanced regime for mass limits enforcement in Australia. It is expected that these initiatives will promote better operator behaviour and improved compliance outcomes.

The effect that the new Compliance and Enforcement reforms will have on mass limits for mass management accredited vehicles in Australia is currently being debated and evaluated. While, as stated earlier, there is a renewed commitment to enforcement of the statutory mass limits in Australia, there is likewise a need to ensure that, at the very least, mass management accredited operators are not disadvantaged through their accreditation. The debate is likely to concentrate on the proposition that as a result of mass accredited operators' efforts to demonstrate better mass compliance, that some access into the minor risk band is warranted. If this is judged to be the case, there may be a consequent debate as to whether some strengthening of the rigour of the current NHVAS is also required.

# REFERENCES

- 1. Austroads, 2003. Heavy Vehicle Mass Measurement Adjustments and Breakpoints: Guidelines for the Physical Measurement of Heavy Vehicle Mass Stage 1 Report prepared by Michael Paine, Vehicle Design and Research Pty Ltd. Austroads Project RUM.HV.C.035. Sydney, Australia. January.
- NRTC, 2000. Compliance and Enforcement: Mass, Dimensions and Load Restraint, Approved Policy Proposal. Melbourne, Australia. November. http://www.ntc.gov.au/DocView.aspx?page=A02201508300970020
- 3. NRTC, 2003a. Model Road Transport Reform (Compliance and Enforcement) Bill, 2003. Melbourne, Australia. March.
- 4. NRTC, 2003b. Road Transport Reform (Compliance and Enforcement) Bill. Regulatory Impact Statement. Melbourne, Australia. August.
- Yeo, D & Moore, B, 1998. Mass Limits Compliance The Development and Potential of Alternative Compliance Schemes. Proc. 5<sup>th</sup> International Symposium on Heavy Vehicle Weights and Dimensions, Vol 1, pp117-129. Queensland, Australia. March – April.